

Remarks/Arguments

Reconsideration of this application is requested.

Claim Status

Claims 1-3 are pending. Claims 1 and 3 are amended.

Claim Rejections – 35 USC 103(a)

Claims 1-3 are rejected under 35 USC 103(a) as obvious over Proctor (US 6,925,070) in view of Moon (US 20040066772). In response, applicant traverses the rejections and amends claims 1 and 3 to clearly distinguish over Proctor and Moon.

Claim 1

Claim 1 is amended to recite that the first wireless communication terminal “receives” packets by using one frequency channel and that the second wireless communication terminal “receives” packets by using a plurality of frequency channels simultaneously. Support for this amendment is found, for example, at page 5, lines 10-13 of applicant’s specification, which states “The single carrier terminal 12 (the first wireless communication terminal) receives data via one of these frequency channels. The multiple carrier terminal 13 (the second wireless communication terminal) can simultaneously receive data via a plurality of frequency channels.”

Thus, claim 1, as amended, recites a wireless telecommunication system that allows mixed use of at least one first wireless communication terminal that receives packets by using one frequency channel (i.e., a single carrier terminal) and at least one second wireless communication terminal that receives packets by using a plurality of frequency channels simultaneously (i.e., a multiple carrier terminal). As further recited in claim 1, the single carrier (first) terminal switches a plurality of frequency channels to receive a preamble signal of the switched frequency channel, thereby making it possible to detect a time slot allocated to the single carrier terminal itself in the switched frequency channel.

The structure of claim 1 is employed because the single carrier terminal cannot receive a plurality of frequency channels simultaneously (see page 8, lines 2-

3, of applicant's specification. The wireless base station transmits nonsimultaneously the preamble signal for the plurality of frequency channels so that the single carrier terminal can receive the preamble signal. With such a structure, the single carrier terminal can receive the preamble signal for the plurality of frequency channels by changing the reception timing thereof. As a result, the used frequency channels are not static but are dynamically changed, thereby improving the utilization efficiency of frequencies in the wireless telecommunication system (see page 9, lines 10-16, of applicant's specification).

The Action asserts that Proctor discloses a wireless base station that that transmits nonsimultaneously for the plurality of frequency channels, citing col. 2, lines 35-38 and 45-62 of Proctor as disclosing "the transmission may be executed periodically". Applicant disagrees. Column 2, lines 51-54 of Proctor states: "Accordingly, short-burst, high-speed data transfers are achieved by simultaneously sending multiple data packets to a particular receiver over multiple channels". Even if column 2, lines 35-38 and 45-62 is interpreted as suggesting periodic transmission, it is clear from column 2, lines 51-54 that transmission should be executed simultaneously.

Moreover, Proctor neither discloses nor suggests the limitation in claim 1 of a wireless base station that "transmits non-simultaneously the preamble signal". Since a wireless base station with such a structure is not disclosed, Proctor also cannot be interpreted as disclosing or suggesting a first wireless communication terminal that "receives the preamble signal by switching the plurality of frequency channels".

Moon does not remedy the deficiencies of Proctor. Moon merely discloses transmitting a preamble signal via a reverse link common channel from a mobile station to a base station. See, for example, lines 3-4 of paragraph 0007 which describes a CDMA mobile communication system as including "...a reverse link for transmitting a signal from the mobile station to the base station...". Moreover,

lines 1-3 of paragraph 0048 states "Referring to FIG. 2, the mobile station (MS) transmits a preamble signal via a reverse link common channel...".

By contrast, in applicant's invention as recited in claim 1, the preamble signal is transmitted from the wireless base station to the wireless communication terminals via frequency channels, and the preamble signal thus transmitted is used by the wireless communication terminals. Thus, Moon teaches away from any combination with Proctor in order to overcome the problem that is overcome by the present invention.

Proctor and Moon do not disclose or suggest each and every limitation of claim 1. Moreover, Proctor and Moon do not recognize the problem that is solved by applicant's invention of claim 1, or realize the advantageous effects of the invention. Accordingly, claim 1 is not obvious over Proctor and Moon, and its rejection under 35 USC 103(a) should be withdrawn.

Claim 2

Claim 2, recites a wireless base station corresponding to the wireless base station of claim 1. In particular, the wireless base station of claim 2 includes a transmission unit that "transmits nonsimultaneously the preamble signal for the plurality of frequency channels." Accordingly, claim 2 is not obvious over Proctor and Moon for the same reasons as claim 1, and its rejection under 35 USC 103(a) should be withdrawn.

Claim 3

Claim 3 is amended to recite that the preamble signal that is "received by a wireless communication terminal is "nonsimultaneously transmitted from a wireless base station for a plurality of frequency channels". Support for this amendment is found in claims 1 and 2, as discussed above, as well as in applicant's specification, for example, at page 6, lines 9-11 ("The base station 11 provides...a transmission unit that transmits preamble signals for the plurality of frequency channels non-simultaneously"). Thus, claim 3 distinguishes over Proctor and Moon

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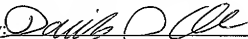
for the same reasons as claims 1 and 2, and its rejection under 35 USC 103(a) should be withdrawn.

Conclusion

This application is believed to be in condition for allowance. The Examiner is invited to contact the undersigned to resolve any issues that remain after consideration of this reply. Any fees due with this response may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,
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